WHAT IS CLAIMED IS:

1. A movable stage apparatus comprising a master stage on which a reflecting master is to be mounted, wherein when a space is divided by a plane including a reflection surface of the master, a guide surface to guide movement of the master stage is arranged in a space opposite to a space where an exposure light beam to be reflected by the master passes.

2. The apparatus according to claim 1, wherein said reticle stage is movably supported in noncontact with a base of the movable stage apparatus.

3. The apparatus according to claim 1, wherein said reticle stage comprises a coarse movement stage which reciprocally moves on the guide surface formed on a base of the movable stage apparatus in a scanning direction along said guide surface in noncontact with said guide surface, and a fine movement stage arranged on said coarse movement stage and having a 6-axis alignment mechanism.

4. The apparatus according to claim 3, wherein a driving point of said coarse movement stage is arranged between the reflection surface of the reticle and said guide surface.

5. The apparatus according to claim 3, wherein a thrust generating mechanism for said coarse movement stage includes a plurality of linear motors arranged parallel to the scanning direction, and said linear

motors are controlled independently of each other, so that a rotational posture of said coarse movement stage is controlled.

6. The apparatus according to claim 5, wherein stators of said linear motors are movably supported in noncontact with said base, and comprise counter masses which move in a direction opposite to a driving direction of said coarse movement stage due to a moving reaction force of said coarse movement stage.

7. The apparatus according to claim 5, wherein driving points for said linear motors and barycentric positions of said stators substantially coincide with each other at least in the non-scanning direction and the gravity direction.

8. The apparatus according to claim 3, further comprising an electromagnet which transmits a force, generated upon acceleration or deceleration of said coarse movement stage, to said fine movement stage in noncontact with said fine movement stage.

9. The apparatus according to claim 3, wherein the reflection surface of the reticle is arranged to face vertically downward, and said fine movement stage is supported in noncontact with said coarse movement stage and is positioned in 6-axis directions by a 6-axis alignment mechanism which can perform position control of said coarse movement stage in 6-axis alignments, and by a self weight support mechanism which supports a

weight of said fine movement stage.

10. The apparatus according to claim 9, wherein said self weight support mechanism so supports a weight of said fine movement stage as to push up said fine movement stage toward said coarse movement stage with a magnetic force.

11. The apparatus according to claim 9, wherein when said 6-axis alignment mechanism does not perform position control of said fine movement stage, said fine movement stage is urged against said coarse movement stage by the magnetic force, and abuts against a alignment section arranged on said coarse movement stage, so that a position and posture of said fine movement stage are regulated.

12. The apparatus according to claim 11, wherein said alignment section causes three spherical bodies to engage with a circular conical groove, V-groove, and flat surface, respectively, thus performing alignment.

13. The apparatus according to claim 3, wherein an interferometer to measure rolling, pitching, and a Z-axis position as a vertical direction of said fine movement stage, an interferometer to measure yawing and a Y-axis position perpendicular to the vertical direction, and an interferometer to measure an X-axis position perpendicular to Y and Z axes are mounted on a top plate of said fine movement stage, and a long mirror to measure the Z-axis position, rolling, and

pitching, a short mirror to measure the Y-axis position and yawing, and a long mirror to measure the X-axis position are mounted on a base which supports a projection optical system and which is vibration-insulated from a base that supports said reticle stage.

14. An exposure apparatus comprising a movable stage apparatus according to claim 1.

15. A device manufacturing method including steps of applying a photosensitive material to a substrate, transferring a pattern by an exposure apparatus according to claim 14 to the photosensitive material on the substrate coated with the photosensitive material, and developing the substrate on which the pattern has been transferred.